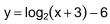
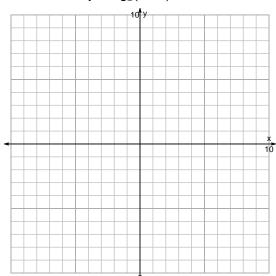
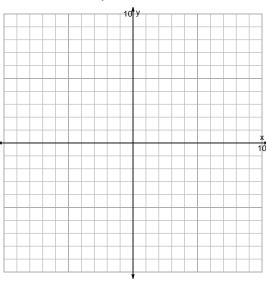
s18quiz: EXP LOG (Practice v119)

1. Graph $y = \log_2(x+3) - 6$ and $y = 2^{x-6} - 5$ on the grids below. Also, draw any asymptotes with dotted lines.





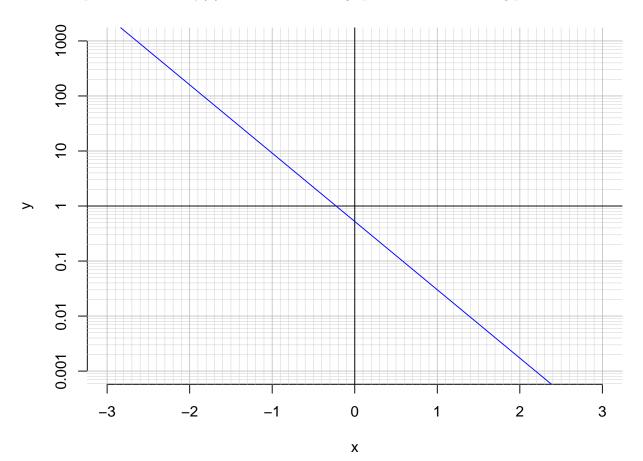
$$y = 2^{x-6} - 5$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-13 = \left(\frac{-7}{4}\right) \cdot 2^{3t/5}$$

3. An exponential function $f(x) = 0.524 \cdot e^{-2.86x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(0.9).

- b. Express $f^{-1}(x)$, the inverse of f.
- c. Using the plot above, evaluate $f^{-1}(500)$.